

**International School**

**Capstone Project 2**

CMU-SE 451

**Product Backlog**

**Version 1.0 Date: 19/03/2024**

**Intelligence IT Job Finding - The Recruitment System support with Chatbot**

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**Project Information**

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**Proposal Document**

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# Introduction

The agile product backlog in Scrum is a prioritized features list, containing short descriptions of all functionalities desired in the product. When applying Scrum, it’s not necessary to start a project with a lengthy, upfront effort to document all requirements. Typically, a Scrum team and its product owner begin by writing down everything they can think of for agile backlog prioritization. This agile product backlog is almost always more than enough for a first sprint. The Scrum product backlog is then allowed to grow and change as more is learned about the product.

## Purpose

Provide a prioritized features list, containing a short description of all functionalities desired in the product.

Lists everything that the product owner and Scrum team feels should be included in the software they are developing.

## 1.2 Scope

* Lists the user’s role.
* Write all the user’s requirements.
* Lists some main functions of the system.
* Short description of all the functionality desired in the product.
* Given the priority of each feature and function of the product.

## 1.3 References

|  |  |  |
| --- | --- | --- |
| **No** | **Source** | **Note** |
| 1 | <https://www.visual-paradigm.com/scrum/what-is-> [product-backlog-in-scrum/](https://www.visual-paradigm.com/scrum/what-is-product-backlog-in-scrum/) | What is Product Backlog in Scrum? Who Responsible for It? |
| 2 | <https://www.scrum-> [institute.org/The\_Scrum\_Product\_Backlog.php](https://www.scrum-institute.org/The_Scrum_Product_Backlog.php) | The Scrum Product Backlog - International Scrum Institute |

1. **Product Backlog**

## 2.1 Product Backlog Items

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Theme** | **As a** | **Priority** |
| PB01 | Chat with Chatbot on the web application | Admin | H |
| PB02 | Dashboard view | Admin | H |
| PB03 | Interact with the chatbot to receive approriate suggestions | Candidate | H |
| PB04 | Create RASA Chatbot Dashboard | Admin | M |
| PB05 | Rules Management | Admin | H |
| PB06 | Stories Management | Admin | H |
| PB07 | Respones Management | Admin | H |
| PB08 | Intents Management | Admin | H |
| PB09 | Job posting management | Employer | H |
| PB10 | Decoration Company | Employer | M |
| PB11 | Comment | Candidate | M |
| PB12 | Forum | Candidate | M |
| PB13 | Job apply | Candidate | H |
| PB14 | Find all information with chatbot | Candidate | H |
| PB15 | Message | Candidate | H |
| PB16 | Employer management | Admin | M |
| PB17 | Candidate management | Admin | M |
| PB18 | Job application management | Admin | M |
| PB19 | Category management | Admin | M |
| PB20 | Interview schedule | Employer | M |
| PB21 | Test Quizz | Candidate | M |
| PB22 | Chat with Chatbot on the web application | Candidate | H |
| PB23 | Job categories | Candidate | M |
| PB24 | Handle hyprid between tools and handling | Admin | M |
| PB25 | Evaluate suitable job | Candidate | H |
| PB26 | Employer registration | Employer | H |
| PB27 | Dashboard view | Employer | H |
| PB28 | Manage CV and Candidate | Employer | H |
| PB29 | Evaluate Suitable CV | Employer | H |
| PB30 | Interview schedule | Candidate | M |

* 1. **Product Backlog Specification**

***Priority and Estimates***

Priorities are set from high (H), medium (M) and low (L):

Priorities of some user stories can be the same with others.

If a user story has dependencies, it must have lower priority than its dependencies.

## VERSION 1: Smart Recruitment System

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Theme** | **As a** | **I want to** | **So That** | **Priority** | **Estimate (hour)** |
| PB01 | Chat with Chatbot on the web application | Admin | Chat with Chatbot | I can control answer of chatbot | H | 4 |
| PB02 | Dashboard view | Admin | Access a dashboard view of activity | I can monitor system-wide performance | H | 8 |
| PB03 | Interact with the chatbot to receive approriate suggestions | Candidate | Interact with the chatbot | I can find approriate IT Company or technology with me | H | 8 |
| PB04 | Create RASA Chatbot Dashboard | Admin | Create RASA Chatbot Dashboard | Create RASA Chatbot Dashboard | H | 8 |
| PB05 | Rules Management | Admin | View and manage rules of chatbot | View and manage rules of chatbot | M | 8 |
| PB06 | Stories Management | Admin | View and manage stories of chatbot | I can control the stories with intent, action,… | M | 8 |
| PB07 | Respones Management | Admin | View and manage respones of chatbot | I can control the answers which the chatbot provides | M | 8 |
| PB08 | Intents Management | Admin | View and manage intents of chatbot | I can control the scenarios that users can enter to search | M | 8 |

***Table 1: Product Backlog Specification*** (Sprint 1)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Theme** | **As a** | **I want to** | **So That** | **Priority** | **Estima te (hour)** |
| PB09 | Job posting management | Employer | Manage job posts | I can add, update and delete Job posts | H | 12 |
| PB10 | Decoration Company | Employer | Decorate Company | I can add new images, banner… of company | H | 16 |
| PB11 | Comment | Candidate | Comment | I can discuss about IT Company with everyone | H | 12 |
| PB12 | Forum | Candidate | Ask question or answer the question | I can know many information and receive advice from people | H | 8 |
| PB13 | Job apply | Candidate | Create, edit, and delete job postings | I can advertise open positions | H | 12 |
| PB14 | Find all information with chatbot | Candidate | Find all information with chatbot | I can know useful inoformation about IT industry | M | 8 |
| PB15 | Message | Employer | Send and receive messages with candidates | I can communicate with potential hires | M | 16 |

***Table 2: Product Backlog Specification*** (Sprint 2)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Theme** | **As a** | **I want to** | **So That** | **Priority** | **Estima te**  **(hour)** |
| PB16 | Employer management | Admin | View and manage employer profiles | I can manage employer accounts | M | 4 |
| PB17 | Candidate management | Admin | View and manage candidate profiles | I can monitor candidate applications | M | 4 |
| PB18 | Job application management | Admin | View and manage job applications and candidate profiles | I can monitor the hiring process and candidate details | M | 4 |
| PB19 | Category management | Admin | Create, edit, and delete job categories | I can organize job listings effectively | M | 8 |
| PB20 | Interview schedule | Employer | Schedule interviews with candidates | I can plan and coordinate the hiring process | M | 8 |
| PB21 | Test Quizz | Candidate | Make test quizz | I can know how suitable for the job | M | 20 |
| PB22 | Chat with Chatbot on the web application | Candidate | Log in using social media credentials | I can quickly access my account | M | 4 |
| PB23 | Job categories | Candidate | View and filter list jobs by categories | I can filter my job by categories | M | 20 |
| PB24 | Handle hyprid between tools and handling | Admin | Handle hyprid between tools and handling | I can solve the problem of chatbot collecting new information | M | 4 |
| PB25 | Evaluate suitable job | Candidate | See my suitability for the job | I can view detailed match percentage, radar chart on skills, experience, salary, other factors and | H | 8 |

***Table 3: Product Backlog Specification*** (Sprint 3)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Theme** | **As a** | **I want to** | **So That** | **Priorit y** | **Estimate (hour)** |
| PB26 | Employer registration | Employer | Register a new employer account | I can access and use the employer features | H | 12 |
| PB27 | Dashboard view | Employer | Access a dashboard with an overview of activity | I can monitor the company's performance | H | 16 |
| PB28 | Manage CV and Candidate | Employer | View and manage candidates who applied to the company | I can evaluate and hire suitable candidates | H | 12 |
| PB29 | Evaluate Suitable CV | Employer | See my suitability for the CV | I can view detailed match percentage, radar chart on skills, experience, salary, other factors and which skills are lacking | H | 8 |
| PB30 | Interview schedule | Candidate | View interview schedules | I can prepare for and attend interviews | M | 8 |

***Table 4: Product Backlog Specification*** (Sprint 4)

# 3 Challenges

|  |  |  |
| --- | --- | --- |
| **No.** | **Challenge** | **Condition** |
| 1 | Time | The project must be completed within 4 months. |
| 2 | Budget | Budget limit $4600 |
| 3 | Human Resources | Team limit with 4 members and 1 mentor develops the system. |
| 4 | Technical | Apply many new current technique |
| 5 | Requirements | Follow owner requirements and market |

# 4 Stakeholders and User Description

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | **Name** | **Description** | **Role** |
| 1 | Candidates | Job seekers applying for roles | Create and manage their profiles, search for job listings, apply to jobs, and communicate with employers |
| 2 | Employers | Employers looking to hire | Create and manage company profiles, post job listings, review candidate applications, and communicate with candidates |
| 3 | Administrator | Recruitment website administrator | Manage all user accounts, backup data and maintain the system |